DEPARTMENT OF THE AIR FORCE
Headquarters Air Force Logistics Command
Wright-Patterson Air Force Base OH 45433-5001

AFMC
~~AFLC~~ REGULATION 65-22

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Maintenance-Engineering and Supply

DEPOT MAINTENANCE WORK SPECIFICATIONS

This regulation gives procedures for preparing maintenance work specifications. It applies to depot work performed at air logistics center (ALC) organic facilities and to contracts with civilian industry. This regulation may not apply to commercial aircraft (maintained according to Federal Aviation Administration standards and specifications) which are procured off-the-shelf for the Air Force. This regulation does not apply to Air Force Reserve units or members.

1. General. This regulation tells how to prepare standardized work specifications. The requirement for maintenance work specifications is established in AFLCR 66-8 and AFLCR 66-67. The maintenance work specification when used in contractual maintenance is the Appendix A to the maintenance contract: when used in organic maintenance it is the Tab A to the project directive. These instructions for each paragraph of the work specification may be varied to allow for the varying requirements of the individual ALC. However, hold variations from standard instructions to an absolute minimum to maintain uniform instructions. ALCs will interchange specifications on major systems to promote uniformity in statements of work on similar items of equipment. The ALC MMM division will monitor such exchanges and efforts and will review programs to help standardize work statements.

2. Maintenance Terms and Explanations. Use definitions of terms in AFLCR 66-8, AFLCR 66-9 and AFLCR 66-67 in any work specification prepared by AFLC. For other terms, refer to AFM 11-1. Coordinate with ALCs (MMM) to get the best possible standardization of terms for work specifications. Explanation of terms is not a substitute for a statement of work requirement.

3. General Instructions for Preparing Maintenance Work Specifications:

a. Role. These specifications are of prime importance in securing maintenance services under the Air Force depot maintenance concept. They govern the scope of maintenance, serve as a basis for competitive contracting, and are worded to help determine cost allocation. The maintenance work specification, when appended to a contract, won't place any obligation upon or provide instructions to government activities or personnel. It is used by the MM__P buyer of the Air Force and other military services to state explicitly the depot maintenance to be done on government equipment. In dealing with ALC organic facility managers, using commands, or private industry, work specifications are the most critical item in maintenance negotiations and the most frequent source of disputes if not specific and encompassing agreed-to maintenance requirements.

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(1) The maintenance work specification must provide full and detailed description of the work to be done by the maintenance facility. As such, hurricane evacuation plans, safety requirements, and all other material not concerned with work requirements are excluded. TOs and other directives that apply to such excluded material won't be cited. The work specification technician determines requirements essential for detailed description of work, for example, inclusion of safety requirements. Safety requirements which involve the general facility capabilities won't be included in the work specification but in Appendix C which is prepared by the Safety Office of the ALC (AFLCR 127-6). Examples of these capability requirements are: runway length, hangar space, fire fighting equipment, and fuel system maintenance facility.

(2) If two or more organizations (organic or contract) are selected to do the same kind of maintenance on the same type equipment, they will use the same work specification. Prepare addenda to the specification when facility/capability differences are authorized between maintenance facilities where the same type of work is to be performed. Use the same format as for the work specification when preparing an addendum. Enter requirements in corresponding sections of the work specification.

(3) When work specifications are prepared for aircraft, engines, missiles or equipment under the provisions of this regulation, include provisions for support of embedded computer resources.

(4) All TOs and other directives identified in the specification apply only to work being accomplished. List all applicable contractor specifications, handbooks, drawings or other pertinent contractor data. If only part of the contractor data is required, cite only that portion.

(5) Make sure all forms referenced are current.

b. Use of Maintenance Work Specifications. The work specification is used by the contracting activity, the maintenance facility, the administrative contract officer (ACO), and Air Force personnel.

(1) The contracting activity uses the work specification to solicit proposals or bids and as a basis for contract award.

(2) The contractor uses the description of the work for preparing and submitting a proposal and for doing the work.

(3) The ACO, or a duly authorized representative, ensures contractor performance is according to the requirements described in the work specification. Within organic maintenance facilities, the project administration officer (PAO) makes sure the work is done according to the work specification.

(4) The system program manager/item manager (SPM/IM) with coordination of using activity gives direction for maintenance to be performed, and ensures the work is done as specified.

(5) Guard against unnecessary repair or repaint for cosmetic purposes.

(6) The using command uses the work specification to identify work performed on their equipment.

c. Preparation. The maintenance work specification is compiled by the MM-P buyer in the directorate of Materiel Management (D/MM) at the ALC responsible for the end item.

(1) Different formats are used for different types of equipment; however, the information contained in each specification is essentially the same. General information is provided to cover data, definitions, maintenance records, forms, and reporting and security requirements. Specific and detailed instructions are given on work requirements. A listing of the applicable TOs and directives is included.

(2) The use of Contractor Field Teams (CFT) is so different from the use of fixed facilities for doing maintenance that the CFT work specifications differ:

(a) In determining and developing requirements for CFTs, follow the guidelines in AFLCR 66-33 and AFR 66-11.

(b) The guidelines set forth elsewhere in this regulation apply also to CFT requirements. However, since the work is to be performed by contractor personnel at government installations, specifically define all work requirements.

(3) Submit changes to the specifications by placing revised pages in the basic specification instead of the original pages. File the original pages until the work is completed. The revised pages will contain the date of the revision. A new specification is prepared when equipment is put on schedule for which a current work specification is not available or when the organization issuing the specification believes a reissue is necessary. Each revision to a work specification will be indicated on the title page indicating revision number and date (figure 1). This will provide a quick reference of the num-

ber and extent of revisions. Figure 2 gives a format for a revision cover sheet.

(4) The SPM/IM determines if revisions to the work specifications are necessary to incorporate time compliance technical orders (TCTOs), TO changes, or supplements. The added cost of such changes will be negotiated with the maintenance facility.

(5) Each ALC will keep a complete and orderly file of its active work specifications. This file will conform to AFR 12-20 and be indexed accordingly on AF Form 80, Files Maintenance and Disposition Plan. Duplicate files aren't authorized, although working copies may be kept on hand by work specification writers for their use. An identification number is assigned for each Appendix A consisting of the two-letter symbol of the ALC preparing the specification, the designation of the equipment, the date by calendar year, and the sequence number of the specification. (In figure 1, San Antonio ALC is indicated by SA, equipment by J57-59, year by 79, number of the specification issued by 25, and revision by 3.) When revisions are issued, number consecutively starting with 1. The basic specification may be reissued (incorporating changes) to reduce materials affecting the work specifications. The preparing organization will cite the office symbol, the name of the person preparing the specification, and telephone number.

(6) The use of formats is encouraged; they allow the technician to complete appendices with a minimum of research and effort, and create a higher degree of standardization. Prepare on one side only to allow for future editing and revision to the specification in a timely manner.

(7) The work specification, Appendix A to a contract, must be reviewed and approved according to AFLCR 66-8, chapter 1. Work specification used only as TAB A to the project directive must be subjected to at least the same review and approval as the project directive. The date on the work specification should be the date of review and approval.

(8) Ensure recurring type work is described in detail to reduce over-and above (O&A) charges for changes to the original work package; allow the repair facility adequate data for planning and estimating costs; and provide a complete and definitized work package on which bidders (organic, interservice, or contract) may be rated equally and fairly.

(9) The preferred numbering system for paragraphs is the decimal system in accordance with MIL-STD-961A. Paragraph numbering beyond the fourth digit is cumbersome (for example, 1.3.2.2.1). Rearrange material where practical to avoid the fifth digit and beyond. Example:

SECTION I. GENERAL

1.	General
1.1	Information
1.2	Terms Explained
1.3	Data
1.3.1	Maintenance Records, Forms and Publications
1.3.2	Reporting Requirements

(10) Ensure delivery of items to the source of repair (SOR) (organic depot, contractor or depot maintenance interservice agreement (DMISA) site) is complete with all required records. The SPM/IM is the contact point for the SOR for any missing records.

d. Importance of Work Specifications. The preparation of work specification suitable for use by maintenance contractors and organic facilities requires extensive research of applicable Air Force documents by technicians experienced in the type work and equipment covered by the specification. When the material has been collected, assimilated, and reduced to manageable dimensions, prepare the specification manuscript. Keep the writing simple and clear.

(1) The instructions provided here allow for writing of standard paragraphs in work specifications. Use standard words, and phraseology, and short paragraphs. The first sentence should contain the main thought. Once a part is named, that name will be used throughout the specification. Vague phrases such as and/or won't be used. Illustrations are very useful; however, they should be used sparingly. Existing art should be used whenever possible.

(2) Notes, cautions and warnings in the text are used when needed to draw attention to particular instructions.

(a) NOTE. An operating procedure or condition which must be high lighted.

(b) CAUTION. Operating procedures or practices which must be observed to avoid damaging equipment.

(c) WARNING. Operation procedures or practices which must be observed to avoid personal injury or loss of life.

e. Editing and Technical Review. The MM_P buyer and coordinating organizations will ensure each work specification is edited and

reviewed for proper format and content, and all essential elements are included and are technically correct.

4. Instructions for Preparing Standard Maintenance Work Specifications for Aircraft (Figure 3):

a. Section I - General. General information is provided to the maintenance facility named in the specification. Maintenance on each element of work specified in the Appendix A must be thoroughly described to a recognized standard of quality so that contractors unfamiliar with Air Force maintenance techniques may produce a quality product.

(1) Information. This paragraph provides general instructions for accomplishing the Section III work requirements on the aircraft and will begin with the following statement: This work specification establishes the minimum work requirements to return the end item to a serviceable but not like new condition.

(2) Terms Explained. List all terms and acronyms, with applicable definitions, contained in the work specification, referenced technical orders, and other directives required for the accomplishment of the contract.

(3) Data:

(a) The maintenance facility will maintain forms listed below, as applicable, during the time the aircraft is at the facility. Other DD or AFTO forms will be added to this list. Include requirements for maintenance data reporting in accordance with TO 00-20-2-13 and AFLCR 66-15.

Column 1 Form No.	Column 2 Form Title	Column 3 Applicable Directive
DD 365-Series	See AFR 0-9, Numerical Index of Departmental Forms for Specific Form Titles	1-18-40, 1-18-50 TOs
AF 2691	Aircraft/Missile Equipment Property Record	AFR 66-12
AF 2692	Aircraft/Missile Equipment Transfer/Shipping Listing	AFR 66-12
AFTO 34	Cylinder Compression History	00-20-5
AFTO 44	Turbine Wheel Historical Record	00-20-5
AFTO 95	Significant Historical Data	00-20-5
AFTO 781-Series	See AFR 0-9, Numerical Index of Departmental Forms for Specific Form Titles	00-20-2, 00-20-5
AFTO 340	B-52 and EC/KC/RC135 Power Package Test Log	1C-135(E)C-10-1 1C-135(K)A-10-1 10-2
AFTO 349	Maintenance Data Collection Record	00-20-2 Series TOs

(b) List reports applicable to the contract maintenance requirement on DD Form 1423, Contract Data Requirements List. List reports applicable to organic maintenance requirements in the work specification, complete with the report title and applicable directive.

(c) Establish the technical data standards to which maintenance will conform. The removal, disassembly, inspection, repair, adjustment, modification, test, assembly, and reinstallation of components and equipment will conform to the basic maintenance instructions manual and other applicable TOs listed in Section V of the work specification:

1. Specify that all structural repairs will conform to the applicable -3 Structural Repair Manual and TO 1-1A-1. (If not covered in these publications, provide where or how the repair information can be obtained.)

2. Specify that replacement parts and material used in the repair of the aircraft or any other equipment will be those authorized by the Government in approved publications.

3. Obtain and use approved torque values and safety methods from publications listed below:

a. Applicable -2 Maintenance Instructions Manual and -3 Structural Repair Manual.

b. If not listed in applicable -2 or -3 manuals, refer to Accessory Maintenance Manual.

c. If not listed in a, or b, above, see TO 1-1A-8.

(4) Ensure inspection, installation, and replacement of flexible hose, fittings, clamps, and flexible tubing not specifically covered in TO 1-. . . .-2 conform as applicable to the following TOs: 1-1A-1; 1-1A-8, 42E1-1-1, 44H3-1-3.

(5) Require that inspection, check, and replacement of vibration isolators (other than engine mounts) be in accordance with TO 1-1-19.

(6) Specify that color coding of new tubing will be in accordance with the basic maintenance handbook for aircraft or TO 1-1-4.

(7) Require that fluids, fuels, oils, greases, and compounds used in servicing aircraft be as specified in the individual work requirements for the aircraft.

(8) Require that inspection, installation, and repair of electrical wiring, conduits, and connectors not specifically covered in TO 1-. . . .-2, conform to TOs 8-1-1 and 1-1A-8.

(9) Include complete requirements for nondestructive inspection (NDI) so that maximum economic advantage may be taken from all types of NDI methods and procedures. These requirements may be obtained from the applicable NDI TO (-36 for aircraft). Incorporate the following guidance as applicable on specific items of equipment:

(a) Use NDI methods (TO 33B-1-1) when:

1. Directed by TOs.

2. Questionable indications of defects are noted.

3. Parts are reworked in any way that could adversely affect the quality of the part such as milling, welding, machining, plating, grinding, heat treating, etc.

(b) Perform magnetic particle inspection on magnetizable parts as per TO 33B-1-1, MIL-1-6868, and the applicable overhaul handbook. Personnel performing the inspection should be qualified in accordance with MIL-STD-410. Procedures in the general TO and specifications won't supersede those of the overhaul handbook unless so stipulated.

(c) Perform penetrant inspection on nonmagnetizable parts for cracks and other surface defects according to TO 33B-1-1 and MIL-1-6866. Personnel making the inspection should be qualified in accordance with MIL-STD-410.

(d) Perform radiographic inspection according to TO 33B-1-1 and MIL-STD-453. Procedures in the general TO and specification won't supersede those of the overhaul handbook unless so stipulated.

(e) Perform NDI (TO 33B-1-1) if applicable. Specific procedures are in the applicable NDI manual (-36 for aircraft).

(10) Make sure the aircraft work specification requires the contractor to comply with DD Form 254, DOD Contract Security Classification Specification, if applicable.

(11) Quality. Guidance for preparing quality requirements for contracts is contained in AFLCR 74-4, Acquisition Quality Assurance Program. Guidance for preparing quality requirements for organic work specifications is listed below. All contractual and organic work specifications must be coordinated with the MM quality organization. Inadequacies or inconsistencies will be reported to MM_R for correction and will be elevated as necessary to ensure positive action.

(a) Inspection and Test Criteria. Acceptability of the quality of maintenance work done organically is determined by inspection and test. Inspection and test criteria must be specified to the same degree of detail required for commodity specifications. The MM quality organization will ensure that work specifications contain specific and definitized inspection and test requirements, including identification of items to be inspected; limits of acceptability; and definition of results to be obtained within predetermined and specified tolerance limits.

(b) Quality Program Requirements. Quality program requirements for organic depot level maintenance are contained in AFLCR 74-2, Maintenance Quality Program. However, since the MM quality organization is responsible for the quality provisions in work specifications, consideration will be given to expanding the organic work specifications, particularly in aircraft and engine Programmed Depot Maintenance (PDM) when it is necessary to emphasize the quality aspects. Requirements for initial production evaluations,

application of quality audits and the identification of mandatory inspections will be considered for each organic work specification.

(c) Mandatory Inspections. Mandatory inspection instructions to organic maintenance will be through normal correspondence addressed to the responsible product organization. Identify each individual characteristic which must be inspected. Mandatory inspection requirements will be eliminated as soon as the need no longer exists for the information. The need for mandatory inspection should be considered when any of the following conditions exist:

1. Experience indicates that quality difficulties are likely to occur.

2. There is no experience with the overhaul source or with the product and the critical nature or complexity of the product warrants mandatory inspection or control and documentation of the actual level of achieved quality.

3. Organic maintenance encounters product quality difficulties during performance and, mandatory inspection is necessary to preclude shipment of defective parts/items while defect causes are being identified and eliminated.

4. Customer feedback data indicates safety of flight/critical defects and the involved product is still being processed through organic maintenance.

5. Mandatory inspections of organic workload must be coordinated with System Program Manager/Item Manager divisions due to the potential impacts on funding, workloading and production schedules.

(12) The specification will forbid the contractor to condemn items without prior approval of the ACO. Contractors won't be allowed to repair items where the cost of parts and labor exceeds 75 percent of the replacement cost of the item, unless authorized by the ACO. Replacement cost is determined using TO 00-20-3. The D/MM will advise ACOs of the criticality of items. Condemnation and repair of items during organic maintenance will be in accordance with the above criteria unless modified by the SPM/IM. Work specifications will contain the following statement, "No item is to be repaired as job routed if serviceable assets are available and in long supply."

(a) Use the routed repair requirement quantity (RRRQ) listing of the D041 system to determine those items with assets in long supply. This report will be furnished quarterly to the SOR for those items being repaired at that facility.

(b) Submit requisitions for serviceable items on a fill or kill basis so that the repair line isn't jeopardized.

(13) Set up specific requirements for the reuse, repair, and replacement of accessories and components. Such requirements are obtained from TO 00-20-1 and the specific publications for the equipment.

(14) Add a tab to the Appendix B for special tools and test equipment required (including sole source). List items by end item/system, national stock number (NSN), part number, nomenclature, manufacturer, and quantity required. If not government-furnished equipment (GFM) or contractor acquired property (CAP) (normally Tab B) add the special or test equipment list to Tab A.

b. Section II - Receipt of Aircraft at Facility:

(1) Specific instructions will be provided on handling of aircraft; personnel qualifications for handling, parking, and mooring aircraft; making hazardous equipment safe; and handling, draining, and storing of fuel. The requirements of TO 11A-1-33, Ground Handling of Explosives Loaded Aircraft, and AFR 127-100, Explosives Safety Standards, will be complied with.

(2) In the event that munitions haven't been removed from an aircraft before input to a contractor's facility, the contractor will:

(a) Comply with the DOD Contractor's Safety Manual for Ammunition and Explosives (DOD 4145.26-M).

(b) Contractor personnel handling or storing munitions items will be trained on the hazards of the items and proper handling procedures.

(c) Remove from the aircraft all munitions which are readily detachable (in addition to those required to be removed for any other reason).

(d) As a minimum, ensure munitions removed from an aircraft are safeguarded continuously while in the contractor's custody, by one or more of the following options:

1. Under direct observation by a guard or an employee normally authorized access to the munitions.

2. In any container or room that meets the standard described in the Industrial Security Manual (DOD 5220.22-M) for the storage of

Secret material except that the room or container will be secured by a 3-position changeable combination lock built into a metal door or by a Federal stocklist high security padlock and high security hasp.

NOTE: Storage of weapons with classified material requires the approval of contractor's cognizant security office.

3. In a locked room or container with the windows and miscellaneous openings protected by bars or screening, and which is either inspected at least every 2 hours by a designated employee or is equipped with an alarm system which will signal an intrusion to a responding force.

(e) Ensure weapons installed in the aircraft are protected as integral parts of the aircraft unless they will be observed at least every 2 hours by a designated employee.

(3) Provide specific instructions for inventory of aircraft through use of AF Form 2691. Indicate the recording and processing of property accountability and shortages. Provide instructions for removal, identification, and storage of loose equipment.

(4) List requirements for preservation of the aircraft. Give specific instructions for the maintenance facility to follow.

(5) Include definitive requirements for Examination and Inventory (E&I) tasks for aircraft input for programmed depot maintenance (PDM), depot maintenance (DM) and analytical conditions inspection (ACI).

c. Section III - Work Requirements. List the specific work requirements in the work specification as indicated below. Divide Section III into five parts to provide a ready means of separating depot maintenance, depot modifications, negotiated TCTOs, negotiated maintenance and special depot requirements (TO 00-25-4). Dividing into parts is only to facilitate system management. Extract work requirements in TOs and other directives whenever practical, and include in the work specification as a specific work requirement rather than by reference to the TO or directive. The work specification mustn't allow the contractor or maintenance facility to determine the work required or the TO or directive that applies.

(1) Part A. Depot Maintenance:

(a) Include all designated depot maintenance and other maintenance tasks requiring special tools, skills, support equipment (SE) facilities normally available only at the depot.

(b) Indicate the inspections required of the maintenance facility. The extent of the inspection will be defined by indicating the degree of disassembly or teardown required, and defining the access doors, inspection openings, or electrical box covers to be removed, or otherwise indicate how the maintenance facility is to gain access to the item to be inspected.

(c) The inspection requirements are obtained from the appropriate aircraft -3 and -6 manuals, PDM work cards, and detailed by system (airframe, landing gear, engines, flight control, etc.) according to the -06 work unit code manual.

(d) Instructions will include specific and detailed procedures for accessory and component repair, replacement, and reuse. Provide instructions on corrosion treatment, painting, and all safety of flight items.

(e) Instructions will provide that all panels, access doors, and covers removed for inspection and repair under this part be reinstalled.

(2) Part B. Depot Modifications (Classes III, IV & V). List depot TCTOs for compliance by the maintenance facility. Include organizational and intermediate TCTOs, which must be accomplished concurrently with the depot TCTOs, in this part.

(3) Part C. Negotiated TCTOs. List only those organizational and intermediate TCTOs certified by the Deputy for Logistics (LG) of major commands for AFLC accomplishment.

(4) Part D. Negotiated Maintenance. The organizational and intermediate maintenance requirements to be included in the Appendix A for aircraft are those certified by the Deputy for Logistics (LG) of the major commands for AFLC accomplishment. The certified organizational and intermediate maintenance requirements will be detailed by aircraft systems as in Part A.

(5) Part E. Special Depot Requirements. Depot work not included in other requirements and depot modification accomplished by speed line or depot teams.

d. Section IV - Final Processing of Aircraft. Include the specific work requirements for final processing of aircraft. Provide specific instructions for the following:

(1) Finishing. Renewal or replacement of markings and insignia, cleaning the interior and exterior of the aircraft, and touchup paint-

ing required. All exterior paints and markings will conform to TO 1-1-4 or properly approved exceptions. TO 1-1-4 will be listed in the Appendix A.

(2) Depreservation.
(3) Servicing.
(4) Weight and balance.
(5) Preflight.
(6) Flight Test.
(7) Postflight.
(8) Preparation for ferry.
(9) Forms preparation.
(10) Government acceptance.

e. Section V - Technical Orders and Other Directives:

(1) Listing of TOs. Furnish the maintenance facility with a complete list of the TOs and other directives needed to perform the maintenance required by the contract. However, the technical data included in the PR package will consist only of the data needed for the work requirements detailed in the appendices to the maintenance contract. Any other data required by the contractor may be secured through the ACO. If the TO or directive is referred to in the work specification, include the TO or directive in the list. However, when an extract of a TO or directive is included in the work specification, without reference to title or number, the directive from which the extract was taken won't be listed in Section V. All aircraft shall be worked under the latest revision to the technical order as approved by the ACO/PAO.

(2) Maintenance of TOs. The work specification will require the maintenance facility to keep current TOs and other technical directives (TO 00-5-1). This requires review of TOs and directives issued during the time the work is being done. The review will consider the impact on other work requirements, cost, schedules, and any other pertinent factors. Send a written evaluation, along with specific backup data for those changes (increases or decreases) which impact the performance of the maintenance facility to the ACO/PAO within 10 workdays after receipt. The maintenance facility won't begin work until changes are approved by the ACO/PAO.

(3) Applicable Technical Orders. List all applicable nonmodification TOs using the following heading:

TO NUMBER SHORT TITLE

(4) Applicable Time Compliance Technical Orders. List all applicable TCTOs using the following standard heading:

TCTO Number	Date	Acft Series	Short Title	Kit Rqmt	Class IV/V Mod No.

(5) Applicable Directives. List the applicable directives using the following standard heading and in the order shown:

Number Title

Air Force Regulations
Air Force Manuals
Air Force Logistics Command Regulations
Air Force Logistics Command Manuals
Air Force - Navy Bulletins - Army Publications
Military Specifications
Air Force - Navy - Army Design Standards
Drawings - Manufacturer or Air Force
Government/Commercial Bulletins

5. Instructions for Preparing Standard Maintenance Work Specifications for Engines. (Figure 4).

a. Section I - General. This section gives general information on accomplishing the requirements in the specification:

(1) Information. Provide general information to the maintenance facility for maintenance on engines, engine accessories, and related parts and will begin with the following statement: "This work specification establishes the minimum work requirements to return the end item to a serviceable but not like new condition."

(2) Terms Explained. List all terms and acronyms, with applicable definitions, contained in the work specifications, referenced technical orders, and other directives required for the accomplishment of the contract.

(3) Data:

(a) The maintenance facility will maintain forms listed below, as applicable, during the time the equipment is at the facility. Other DD or AFTO forms may be added to this list, as the SPM/IM determines necessary. Requirements for maintenance data reporting will be included in accordance with TO 00-20-2-13 and AFLCR 66-15.

Column 1	Column 2	Column 3
Form No.	Form Title	Applicable Directive
AFTO 34	Cylinder Compression History	00-20-5
AFTO 44	Turbine Wheel Historical Record	00-20-5
AFTO 95	Significant Historical Data	00-20-5
AFTO 349	Maintenance Data Collection Record	00-20-2 Series TOs

(b) List reports applicable to the contract maintenance requirement on DD Form 1423, Contract Data Requirements List. List reports applicable to organic maintenance requirements in the work specification complete with the report title and applicable directive.

(c) Establish the technical data standard to which maintenance will conform. The removal, disassembly, inspection, repair, adjustment, modification, test, assembly, and reinstallation of components and equipment will conform to the basic maintenance instructions and the applicable TOs listed in Section IV of the work specification. Definitive requirements for NDI may be included to get greatest economic advantage from NDI methods and procedures. The governing directive for NDI is TO 33B-1-1. Follow this TO and those applicable to NDI for the particular engine when NDI processes and procedures are given in the work specification.

(4) Security. The engine work specification will require the maintenance facility to comply with DD Form 254, if applicable.

(5) Quality. Guidance for ALC use in preparing quality requirements for contractual work specifications is in AFLCR 74-4. Guidance for organic work specifications is in paragraph 4a.(11) of this directive. Coordinate all work specifications with the MM quality organization.

(6) Condemnation and Repair. The specification will forbid the contractor to condemn items without prior approval of the ACO. Contractors won't be allowed to repair items where the cost of parts and labor exceeds 75 percent of the replacement cost of the item unless authorized by the ACO. Replacement cost will be determined using AFR 173-13. The D/MM will advise ACOs of the criticalness of items. Condemnation and repair of items during organic maintenance will be according to the above criteria unless modified by the SPM/IM. Organic work specifications will contain the following statement. "No item is to be repaired as job routed if serviceable assets are available and in long supply."

(a) Use the RRRQ listing of the D041 system to determine those items with assets in long supply.

(b) Submit requisitions for serviceable items on a fill or kill basis so that the repair line isn't jeopardized.

(7) Accessory and Component Reuse, Repair and Replacement. Establish the requirements for the reuse, repair, and replacement of accessories and components (TO 00-20 Series and the specific publications for the equipment).

(8) Special Tools and Test Equipment. Add a tab to Appendix B for special tools and test equipment required (including sole source). List items by end item/system, NSN, part number, nomenclature, manufacturer, and quantity required.

b. Section II - Receipt of Engines at Facility:

(1) Handling. Give specific instructions on how to handle engines input for maintenance. Cite or extract instructions from applicable TOs or other directives.

(2) Inventory. Provide detailed instructions on inventory of engines, parts, and accessories. Advise the maintenance facility how to verify its records on receipt of engines and what to do when there is a variance between the records and the actual count. Advise of the need to inspect the engines and parts for damage. Provide instructions for inspection government-furnished property (GFP), management of items subject to repair (MISTR) and reporting of damaged engines.

(3) Preservation. Provide complete instructions for preservation of engines and parts. Provide for storage of GFP and MISTR items (exchangeable assemblies) and storage of engine containers. Furnish instructions for storing engines and parts awaiting work.

c. Section III - Work Requirements:

(1) General. Provide information on the type work to be performed, type of engines to be

worked on, and the special or limiting factors involved. If minor repair or jet engine base maintenance is to be done, advise the maintenance facility in this paragraph.

(2) Specific Work Requirements:

(a) Provide specific instructions on disassembly of the engines. Either extract the instructions from applicable TOs and directives or cite the directives. Advise that precleaning of engine parts before disassembly isn't required. Give details on the disposition of unserviceable or questionable parts discovered during disassembly. Provide instructions for disposition of fuels, oils, and lubricants removed from the engine.

(b) Furnish instructions for cleaning parts after disassembly. Specify the cleaning material and methods clearly so no damage to engine parts will result. Provide specific instructions on corrosion control; that is, the removal of oxidation from metal parts and the preservatives to be applied to safeguard against further oxidation. Advise that all parts removed from the engines will be stored in areas where they will be safe from corrosion and damage.

(c) Provide specific instructions for maintenance required. Use the -6 manuals plus any other TOs and directives to ensure full details are given for maintenance on the engine. It is preferable to provide the maintenance instructions broken down into the various engine sections, for instance, propeller shaft case, magneto drive case, crankcase, turbine, carburetor master control, fuel system, impeller, etc. In this way, full and complete coverage for each section of the engine can be ensured. The instructions furnished should apply to all engines involved in the maintenance requirement. If alteration of overhaul or other maintenance instructions is necessary to fit special requirements of engines, be sure to include the correct instructions for each engine. Make sure sufficient details are provided so the work done can be judged by a recognized standard of quality.

(d) For special work requirements such as engine reclamations, overhaul of Security Assistance program engines, or other extraordinary work, provide full and detailed provisions. Explain maintenance required in such special situations since the contractor will most likely be unfamiliar with the work required. Any special instructions on the organic facility should also be included.

(e) Provide specific instructions for the finishing required to get the engines ready for block test and government acceptance. Refer to applicable directives or include extracted provisions in the work specification.

(f) Specify the TOs and other directives or include the procedures applicable to block test. Include instructions for quality audit of serviceable exchangeable items based on customer feedback.

d. Section IV - Technical Orders and Other Directives:

(1) Listing of TOs. Furnish a complete list of the TOs and other directives needed to perform the maintenance required. However, the technical data included in the program requirement (PR) package will consist only of the data needed for the work requirements detailed in the appendices to the maintenance contract. Any other data required by the contractor may be secured through the ACO. If the TO or directive is referenced in the work specification, the TO or directive must be included in the list. However, when an extract of a TO or directive is included in the work specification, but the TO or directive isn't referred to by title or number, the directive won't be listed in Section IV.

(2) Maintenance of TOs. The work specification will require that the maintenance facility maintain all TOs and other technical directives applicable to the work requirement in an updated and current status according to TO 00-5-1. This requires compliance with the latest dated TOs and directives issued during the time the work is being done. The work specification will also require the maintenance facility to make a timely review of all updated TOs and directives applicable to the work requirement. The review will consider the impact on other work requirements, costs, schedules, and any other pertinent factors. Send a written evaluation along with specific backup data for those changes (increases or decreases) which impact the performance of the maintenance facility to the ACO/PAO within 10 workdays of receipt. The maintenance facility won't begin work until changes have been approved by the ACO/PAO.

(3) Applicable Technical Orders. List all applicable nonmodification TOs using the following standard heading:

TO NUMBER SHORT TITLE

(4) Applicable Time Compliance Technical Orders. List all applicable TCTOs using the following standard heading:

TCTO Number	Acft Series	Short Title	Kit Rqmt	Class IV/V Mod No.

(5) Applicable Directives. List the applicabl e directives using the following standard heading and in the order shown:

Number Title

Air Force Regulations
Air Force Manuals
Air Force Logistics Command Regulations
Air Force Logistics Command Manuals
Other USAF Major Command Regulations Air Force - Navy Bulletins - Army Publication
Military Specifications
Military Standards Air Force - Navy - Army Design Standards
Drawings - Manufacturer or Air Force
Government/Commercial Bulletins

6. Instructions for Preparing Standard Maintenance Work Specification for Equipment. (Figure 5).

a. Section I - General:

(1) Information. Provide general information for accomplishing the repair, overhaul, or modification of Air Force equipment and will begin with the following statement: This work specification establishes the minimum work requirements to return the end item to a serviceable but not like new condition.

(2) Terms explained. List all terms and acronyms, with applicable definitions, contained in the work specification, referenced technical orders, and other directives required for the accomplishment of the contract.

(3) Data:

(a) Instruct the maintenance facility to maintain forms listed below, as applicable, during the time the equipment is at the contractor's facility. Other DD or AFTO forms may be added to this list. Include requirements for maintenance data reporting according to TO 00-20-2-13 and AFLCR 66-15:

Column 1 Form No.	Column 2 Form Title	Column 3 Applicable Directive
AFTO 95	Significant Historical Data	00-20-4, 00-20-7
AFTO 349	Maintenance Data Collection Record	00-20-2 Series TOs

(b) List reports applicable to the contract maintenance requirement on DD Form 1423. List reports applicable to organic maintenance requirements in the work specification, complete with report title and applicable directive.

(c) Establish the technical data standard to which maintenance will conform. The removal, disassembly, inspection, repair, adjustment, modification, test, assembly, and reinstallation of components and equipment will conform to the basic maintenance instructions manual and other applicable TOs listed in Section IV of the work specification. Include complete requirements for NDI to get greatest economic advantage from NDI methods and procedures. Get these requirements from the applicable NDI TO or other directive for the equipment.

(4) Security. The maintenance facility will comply with DD Form 254, if applicable.

(5) Quality. Guidance for ALC use in preparing quality requirements for contractual work specifications is in AFLCR 74-4. Guidance for organic work specifications is in paragraph 4a.(11) of this directive. Coordinate all work specifications with the MM quality organization.

(6) Organic Condemnation and Repair. The specification will forbid the contractor to condemn items without prior approval of the ACO. Contractors won't be allowed to repair items where the cost of parts and labor exceeds 75 percent of the replacement cost of the items unless authorized by the ACO. Determine replacement cost using AFR 173-13. The D/MM will advise ACOs of the criticality of items. Condemnation and repair of items during organic maintenance will be in accordance with these criteria unless modified by the SPM/IM. The provisions of TO 00-25-240 apply for applicable support equipment items unless specifically waived by the IM. Work specifications will contain the following statement: "No item is to be repaired as job routed if serviceable assets are available and long supply."

(a) Use the RRRQ listing of the D041 system to determine those items with assets in long supply.

(b) Submit requisitions for serviceable items on a fill or kill basis so that the repair line isn't jeopardized.

(7) Accessory and Component Reuse, Repair and Replacement. Set up requirements for the reuse, repair and replacement of accessories and components (TO 00-20 Series and specific publications for the equipment).

(8) Special Tools and Test Equipment. Add a tab to Appendix B when there is a need to identify special tools and test equipment. If all special tools and equipment were identified during the preplanning process for the repair of other equipment, then so state on the table to Appendix A and don't list. When a list is used, provide for each item the following: NSN, part number, manufacturer and quantity required.

b. Section II - Receipt of Equipment at Facility:

(1) Handling. Provide specific and detailed instructions for the maintenance facility to follow. Instructions will cover uncrating and storing of the reusable containers, cleaning of the equipment, precautions required to protect the equipment under all environmental conditions, and any safety precautions on hazards concerned with the equipment.

(2) Inventory. Furnish specific instructions to the maintenance facility for an inventory inspection to determine the completeness of the equipment plus instructions on the actions to be taken in reporting missing or incomplete parts.

(3) Preservation. Furnish detailed instructions on preservation of the equipment, use of oils, greases, lubricants, and any special preservatives required.

c. Section III - Work Requirements. The instructions for work may vary greatly depending on the type of equipment. The repair instructions required for maintenance of component or subassembly items will be much different in volume and content from those required for maintenance of a strategic missile or one of the communications-electronics (C-E) systems. Some items of equipment have a requirement for limited repair and thus the repair instructions must be limited accordingly. All of the above factors may affect the work specification. The format for equipment work specifications accompanying instructions must be used as a guide in writing maintenance work specifications for equipment other than aircraft and engines; however, these work specifications will also require detailed definition and standardization. Variances from the standard format and instructions are permissible only where absolutely necessary. State exactly what is to be done and how it is to be done. This will minimize over-and-above work and prevent misunderstanding between the Government and the contractor.

(1) General. Provide information on the type of work required, such as PDM, repair or overhaul. Indicate the extent of the work or, if necessary, the concept of maintenance and any limiting factors. For instance, minor defects won't be cause for rejection if final tests are passed, or that restoration to like-new condition isn't required.

(2) Specific Work Requirements. Provide detailed instructions for the maintenance facility. The following elements should be considered:

(a) Disassembly is limited to that necessary to accomplish the required inspection, test, repair, or replacement. Provide specific instructions on the equipment being maintained.

(b) Provide details on the cleaning to be done during repairs.

(c) Indicate the depth of inspections required to locate and identify defects and deficiencies and the extent of repairs authorized after defects are discovered.

(d) Corrosion control is essentially a part of inspection but it is specifically identified so that detailed provisions are included for inspections.

(e) Include the provisions for doing the maintenance. Instructions will vary with equipment and the type of maintenance required. The work requirements are obtained from the repair and overhaul manuals for the equipment and any other special requirements. Correction of corrosion defects is specified here. Also provide instructions for the repair of critical items on the reuse, repair, and replacement of accessories and components.

(f) Include instructions on painting, calibration, final testing, and preservation.

d. Section IV - Technical Orders and Other Directives:

(1) Listing of TOs. Furnish a complete list of the TOs and other directives needed to perform the maintenance required. However, the technical data included in the PR package will consist only of the data needed for the work requirements detailed in the appendices to the maintenance contract. Any other data required by the contractor may be secured through the ACO. If the TO or directive is referred to in the

work specification, the TO or directive must be included in the list. However, when an extract of a TO or directive is included in the work specification, but the TO or directive isn't referred to by title or number, the directive won't be listed in Section IV.

(2) Maintenance of TOs. The work specification will require the maintenance facility to maintain all TOs and other technical directives in an updated and current status according to TO 00-5-1. This requires compliance with the latest dated TOs and directives issued during the time the work is being done. The work specification will also require the maintenance facility to make a timely review of all updated TOs and directives applicable to the work requirement. The review will consider the impact on other work requirements, costs, schedules, and any other pertinent factors. A written evaluation, along with specific backup data for those changes (increases or decreases) which impact the performance of the maintenance facility, will be sent to the ACO/PAO within 10 workdays after receipt. The maintenance facility won't begin work until changes have been approved by the ACO/PAO.

(3) Applicable Technical Orders. List all applicable nonmodification TOs using the following standard heading:

TO NUMBER DATE SHORT TITLE

(4) Applicable Time Compliance Technical Orders. List all applicable TCTOs using the following standard heading:

TCTO Number	Date	Acft Series	Short Title	Kit Rqmt	Class IV/V Mod No.

(5) Applicable Directives. List the applicable directives using the following standard heading and in the order shown:

Number Date Title

Air Force Regulations
Air Force Manuals
Air Force Logistics Command Regulations
Air Force Logistics Command Manuals
Other USAF Major Command Regulations
Air Force - Navy Bulletins - Army Publication
Military Specifications
Military Standards
Air Force - Navy - Army Design Standards
Drawings - Manufacturer or Air Force
Government/Commercial Bulletins

SAN ANTONIO AIR MATERIEL AREA

KELLY AIR FORCE BASE, TEXAS

AF CONTRACT NO. 41(608)9165
(PURCHASE REQUEST NUMBER)

(APPENDIX A)
DATE: 82 JUN 15
REVISION NO. 3
Date: 82 Nov 1

WORK SPECIFICATION

TYPE WORK: OVERHAUL OF J-57-59 ENGINE

CONTENTS

SECTION PAGE

FILE NUMBER: SA/J-57-59/79-25/3

PREPARED BY: MMLT/R.A. SMITH/55427

Figure 1. Sample Title Page with Revision

SAN ANTONIO AIR LOGISTICS CENTER

KELLY AIR FORCE BASE, TEXAS 78241

AF CONTRACT NO._____REVISION NO._____DATE_____

APPENDIX A WORK SPECIFICATION

DATE_____
TYPE WORK_____
TYPE EQUIPMENT_____

Appendix A Work Specification File No._____is revised as follows:

1. The attached revised pages will be inserted in the basic Appendix A according to page number and the superseded pages will be removed and filed separately for reference purposes.

2. The portion of the attached revised pages affected by revision is indicated by a vertical black line opposite the revision.

3. After revised pages have been inserted into the basic Appendix A, this cover sheet will be attached to the front of the basic Appendix A for reference to revisions, revised pages and dates of revisions as listed in subsequent blocks.

Rev No	Pages	Date	Rev No	Pages	Date	Rev No	Pages	Date

PREPARED BY:

Figure 2. Revision Cover Sheet Format

STANDARD FORMAT FOR AIRCRAFT MAINTENANCE WORK SPECIFICATION

SECTION I GENERAL

1.1	Information
1.2	Terms-Explained
1.3	Data
1.3.1	Maintenance Records, Forms, and Publications
1.3.2	Reporting Requirements
1.3.3	Technical Data
1.4	Security
1.5	Quality
1.6	Condemnation and Repair
1.7	Accessory and Component Reuse, Repair, and Replacement

SECTION II RECEIPT OF AIRCRAFT AT FACILITY

2.	Handling
2.2	Inventory
2.3	Preservation

SECTION III WORK REQUIREMENTS

3.1	General
3.2	Specific Work Requirements
3.2.1	PART A.DEPOT MAINTENANCE
3.2.2	PART B.DEPOT MODIFICATIONS (CLASSES NO III IV & V)
3.2.3	PART C.NEGOTIATED TCTOs
3.2.4	PART D.NEGOTIATED MAINTENANCE
3.2.5	PART E.SPECIAL DEPOT REQUIREMENTS

SECTION IV FINAL PROCESSING OF AIRCRAFT

4.1	Finishing
4.2	Depreservation
4.3	Servicing
4.4	Weight and Balance
4.5	Preflight
4.6	Flight Test
4.7	Post-Flight
4.8	Preparation for Ferry
4.9	Forms Preparation
4.10	Government Acceptance

SECTION V TECHNICAL ORDERS AND OTHER DIRECTIVES

5.1	Applicable Technical Orders
5.2	Applicable Time Compliance Technical Orders
5.3	Applicable Directives

Figure 3. Format for Aircraft Work Specifications

STANDARD FORMAT FOR ENGINE MAINTENANCE WORK SPECIFICATION

SECTION 1 GENERAL

1.1 Information
1.2 Terms Explained
1.3 Data
3.1 Maintenance Records, Forms and Publications
3.2 Reporting Requirements
3.3 Technical Data
1.4 Security
1.5 Quality
1.6 Condemnation and Repair
1.7 Accessory and Component Reuse, Repair and Replacement

SECTION II RECEIPT OF ENGINES AT FACILITY

2.1 Handling
2.2 Inventory
2.3 Preservation

SECTION III WORK REQUIREMENTS

3.1 General
3.2 Specific Work Requirements
3.2.1 Disassembly
3.2.2 Cleaning and Corrosion Control
3.2.3 Maintenance
3.2.4 Special Work Requirements
3.2.5 Finishing
3.2.6 Block Test and Government Acceptance

SECTION IV TECHNICAL ORDERS AND OTHER DIRECTIVES

4.1 Applicable Technical Orders
4.2 Applicable Time Compliance Technical Orders
4.3 Applicable Directives

Figure 4. Format for Engine Work Specification

STANDARD FORMAT FOR EQUIPMENT AND EXCHANGEABLES MAINTENANCE WORK SPECIFICATION

SECTION I	GENERAL
1.1	Information
1.2	Terms Explained
1.3	Data
1.3.	1Maintenance Records, Forms, and Publications
1.3.2	Reporting Requirements
1.3.3	Technical Data
.1.4	Security
1.5	Quality
1.6	Condemnation and Repair
1.7	Accuracy and Component Reuse, Repair and Replacement

SECTION II RECEIPT OF EQUIPMENT AT FACILITY

2.1	Handling
2.2	Inventory
2.3	Preservation

SECTION III WORK REQUIREMENTS

3.1	General
3.2	Specific Work Requirements
3.2.1	Disassembly
3.2.2	Cleaning
3.2.3	Inspection
3.2.4	Corrosion Control
3.2.5	Maintenance
3.2.6	Finishing

SECTION IV TECHNICAL ORDERS AND OTHER DIRECTIVES

4.1	Applicable Technical Orders
4.2	Applicable Time Compliance Technical Orders
4.3	Applicable Directives

Figure 5. Format for Equipment Work Specification

OFFICIAL

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Director of Information Management

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UNCLAS

SUBJ: INTERIM MESSAGE CHANGE 92-1 TO HQ AFLCR 65-22 JUN 88

1. EFFECTIVE 1 JUL 92 AFLCR 66-22, BECOMES AFMC RATHER THAN AFLCR. ALL REFERENCES TO AFLC OR AFSC IN SUBJECT REGULATION IS AFFECTED. PLEASE MAKE NECESSARY CHANGES, THANK YOU IN ADVANCE FOR YOUR COOPERATION IN THIS MATTER.

2. POINT OF CONTACT IS J. JOHNSON, SR., HQ AFLC/XRIR, DSN 787-4139.

JOHNSON/JJ/XRIR-2/74139/22 APR 92
FMW/ {REGCNG2} FILE:

STANLEY A. SIEG, Colonel, USAF
Director, Requirements
Integration and Analysis
DCS/Requirements

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